

Word Problems

The *Sergeant Never Sleeps!* suggests several math activities. Either make and use an overhead transparency for whole-class discussion or pair or group the students to work together to find solutions. (Caution: Be sure to cover the answers before displaying this page. If using the metric system, adjust measurements on this page accordingly.)

1. The men and women of the Sea Minotaur worked for hours pumping water from their leaking ship. In one day, 20 tons of water were removed from the ship's hold. How much water was that? Use a calculator to determine how many pounds and how many gallons that would be.
(Remember: one ton = 2000 lbs; one gallon = 8 lbs.)
2. Currently in America, each individual uses approximately 176 gallons of water per day. Assuming the ocean water was clean and drinkable, how many people would have been served by the Minotaur's unfortunate task?
3. On page 23, Captain Diana is sending a message to raise funds for the Jamestown colony in Virginia. "Finally, fewer than a fifth of the one hundred men who went out in 1607, just two years before, were still alive." Approximately how many of those colonists were still alive? What year was it?
4. During the six-months "starving time," fewer than sixty of the five hundred settlers had survived. What was the maximum number of settlers who died? What percentage of settlers was that?
5. One night while mining for copper in the bay, Tom Burlow and Soraas caught three mussels "...that must have weighed six hundred pounds between them." On average, what is the weight of each mussel? What fraction of a ton is six hundred pounds?
6. Shortly after the 150 settlers from Roanoke had made it to the colonies, 100 new people arrived at Jamestown. How many new settlers were there altogether? The 150 men, women, and children had sailed in on five ships. If they had been divided equally among the ships, how many people were aboard each ship?
7. Tom built a one-bedroom cabin in Henrico. It had a stone fireplace that was ten feet wide. How many inches is that?
8. The window in Tom's cabin was two feet high by two feet wide. What was the perimeter of the window? What was the area of the window?

Answers

1. $20 \times 2,000 = 40,000$ lbs; $40,000 \div 8 = 5,000$ gal.
2. $176 \times 37\% = 42$ people
3. $110 \div 22 = 5$; $5607 \div 2 = 2803$
4. $500 - 60 = 440$; $440 \div 500 = .88 = 88\%$
5. $600 \div 4 = 150$; $600 \div 2000 = .3 = 30\%$
6. $150 \div 5 = 30$; $30 \div 2 = 15$
7. $10 \times 12 = 120$ inches
8. $P=2(l+w)$; $P=2(2+2)$; $P=8$ ft.; Area squared: $A=2 \times 2$ squared; $A=4$ square feet